matter should arise and entry of the amendment is respectfully requested.

At page 2 of the Office Action, the Examiner acknowledges the cancellation of claim 43 and the amendments to claims 1 and 42, and notes that the objection to the specification has been withdrawn.

Also at page 2 of the Office Action, the Examiner withdraws the rejection of claim 42 under 35 U.S.C. §102(e) over Watanabe et al. (U.S. Patent 6,074,795). Additionally, the Examiner withdraws the rejection of claims 1-14, 16-23, 25-29, and 43 under 35 U.S.C. §103(a) over Watanabe et al. alone or combined with other cited references.

At page 3 of the Office Action, the Examiner withdraws the rejection of claims 1-4, 16, and 42 under 35 U.S.C. §102(e) over Nakamura (U.S. Patent No. 5,863,692). Also the Examiner withdraws the rejection of claims 5, 7, 10, 19, 31, and 36 under 35 U.S.C. §103(a) over Nakamura alone or combined with other cited references.

At page 4 of the Office Action, the Examiner rejects claims 1, 2, 5-7, 10, 16, 19, 31, and 36 under 35 U.S.C. § 112, first paragraph, as containing a subject matter which was not described in the specification. The Examiner asserts that the specification does not provide an adequate written description for the term "colloidal inorganic particles" as recited in the instant claims. More specifically, the Examiner asserts that the genus "colloidal inorganic particles" recited in the instant claims is broader than the disclosed species "colloidal silica" because it includes other colloidal inorganic particles that are not silica. For the following reasons, the rejection is respectfully traversed.

The specification of the present application clearly shows that the toner resin includes inorganic particles, which also include colloidal inorganic particles. More specifically, page 8, lines 15-18 of the present application state: "[t]he inorganic particles, preferably silica, are

introduced into the resin during the compounding of the resin. The inorganic particles, and preferably the silica are preferably not in the charged state. Further, the silica is preferably colloidal silica." To assist the Examiner, the claims have been amended to recite colloidal silica. Accordingly, the rejection under 35 U.S.C. §112, first paragraph, should be withdrawn.

At page 5 of the Office Action, the Examiner withdraws the allowability of claims 15 and 24 in view of Hopper et al. (U.S. Patent No. 6,416,920) and further in view of Watanabe et al. The details of the Examiner's decision to withdraw the allowability of claims 15 and 24 will be discussed in the forthcoming pages.

At page 6 of the Office Action, the Examiner rejects claims 30 and 35 under 35 U.S.C. §102(e) as being anticipated by Watanabe et al., or in the alternative, under 35 U.S.C. §103(a) as being obvious by virtue of the same patent. The Examiner asserts that the applicants have not provided any objective evidence that a person having ordinary skill in the art would not have expected the charge in two minutes to differ substantially from the virtually identical values at zero minutes and at greater than ten minutes. However, the Examiner states that should the applicants provide a copy of Nash (and if the Examiner determines that the applicants' description of Nash in the previous amendment is accurate), the rejection would be withdrawn. For the following reasons, this rejection is respectfully traversed.

In the Amendment dated November 12, 2002, the applicants submitted a copy of Nash to the Examiner. The date-stamped PTO postcard confirms this point. Nonetheless, in response to the Examiner's comment, the applicants provide a second copy of Nash to the Examiner. The previous comments in view of this reference apply here. Accordingly, the rejection under 35 U.S.C. §102(e) or 103(a) over Watanabe et al. should be withdrawn.

At page 7 of the Office Action, the Examiner rejects claims 1-4, 16, and 42 under 35 U.S.C. §103(a) as being unpatentable over Watanabe et al., as evidenced by Ogawa et al. (U.S. Patent No. 6,103,439) and Akiyama et al. (U.S. Patent No. 5,422,214). The Examiner asserts that according to Ogawa et al. and Akiyama et al., silica particles R-972 are recognized in the art as colloidal silica. However, the Examiner relies predominantly on Watanabe et al. to reject the claimed invention. The Examiner asserts that the toner in Example 1 of Watanabe et al. comprises 84.7 wt.% of a styrene/butyl acrylate binder resin, 1.7 wt.% of a charge control agent, about 4.2 wt.% of a polyethylene releasing agent, and about 0.8 wt.% of the internal silica particles, based on the weight of the toner particles. The Examiner then contends that the upper limit of the range "about 0.1 wt.% to about 0.5 wt.%" of the inorganic particles recited in claim 1 of the present application reads on the amount of "about 0.8 wt.%" of Watanabe et al. Additionally, the Examiner states that Watanabe et al. shows that the releasing agent can be preferably used in an amount of from about 0.5 to about 20 wt.%. The Examiner notes that if one adjusts the amount of the polypropylene, in Watanabe et al., to 0.5 wt.%, based on the weight of the toner particles, the amount of the polyethylene releasing agent would be about 0.5 parts by weight and the amount of silica particles would be about 0.1 wt.%, based on the weight of the toner particles, which would fall in the range of the claimed invention. For the following reasons, the rejection is respectfully traversed.

The inorganic particles of the claimed invention are colloidal inorganic particles, like colloidal silica. However, the silica in Watanabe et al. is hydrophobized silica, which has different properties and characteristics than the colloidal inorganic particles of the claimed invention (e.g., one is dispersible in water and the other is not).

With respect to the Examiner's assertion that Watanabe et al. recognizes the

commercially available silica particles R-972 as colloidal silica, according to column 7, lines 1-4 of Watanabe et al., R-972, manufactured by Nippon Aerosil Co. is hydrophobized silica powder. As the Examiner should appreciate, colloidal silica (see attached Fuso and Nissan Chemical web pages) is dispersible in water while hydrophobized silica is not. Therefore, R-972 is not a colloidal silica with the same characteristics as the colloidal silica of the claimed invention.

As shown in the attached article entitled: "Hydrophobic Fumed Aerosil: Applications & Uses," Technical Library, Degussa Corporation, R972 is manufactured by treating hydrophilic Aerosil 130 with dimethyl-dichlorosilane (DDS) at 500° C in a continuous fluidized bed process. Aerosil R972 is the most hydrophobic of the Aerosil R97-series of hydrophobic fumed silicas with roughly 70% of the surface silanol groups being methylated in the process. Clearly, R-972 is not colloidal silica. The statements made in Ogawa and Akiyama are clearly in error as proven by the attached brochure. One skilled in the art would clearly appreciate that R972 is hydrophobic, not colloidal, and that Akiyama should have said "hydrophilic fumed silica."

Additionally, it appears that the Examiner is using hindsight to create the claimed invention. There is no teaching in Watanabe et al. that would indicate that using the lowest amounts of the releasing agent set forth in Watanabe et al. would produce the beneficial properties listed by the Examiner. Moreover, the Examiner's calculations are not completely valid as indicated previously. Furthermore, the inorganic particles of the claimed invention are not the same as the silica in Watanabe et al. Therefore, the weight percentages cannot be compared with each other. Accordingly, the rejection under 35 U.S.C. §103(a) over Watanabe et al., as evidenced by Ogawa et al., and Akiyama et al. should be withdrawn.

At page 10 of the Office Action, the Examiner rejects claims 5, 10, and 19 under 35 U.S.C. §103(a) as being unpatentable over Watanabe et al., as evidenced by Ogawa et al. and Akiyama et

al., and further combined with Kawasaki et al. (U.S. Patent No. 5,230,978). However, the Examiner relies predominantly on Watanabe et al. and Kawasaki et al. to reject the claimed invention. The Examiner again repeats her previous remarks with respect to Watanabe et al., and admits that the toner of Watanabe et al. does not show the binder recited in claim 5 of the present application. However, the Examiner notes that the binder resins can include the resins used in conventional toners. The Examiner states that Kawasaki et al. shows a toner binder resin using a cross-linked styrene-acrylate copolymer that is within the limitation recited in claim 5.

Additionally, the Examiner observes that claim 10 is written in a product-by-process format. The Examiner believes that the co-polymer of Kawasaki et al. meets the compositional limitations recited in claim 5. The Examiner also believes that the co-polymer of Kawasaki et al. appears to be the same or substantially the same as the toner resin made by the "limited coalescence" process recited in claim 10 of the present application. The Examiner further notes that it would have been obvious for a person having ordinary skill in the art, in view of the teachings of Kawasaki et al., to use a cross-linked styrene-acrylate co-polymer as the binder resin, because that person would have had a reasonable expectation of successfully obtaining a developer capable of being used in a high speed copier, and providing high quality images without fog when fixed at low temperatures. For the following reasons, this rejection is respectfully traversed.

The arguments set forth above with respect to Watanabe et al. apply equally here. Additionally, Kawasaki et al. does not overcome any of the deficiencies noted with respect to Watanabe et al. Furthermore, claims 5, 10, and 19 are dependant directly or indirectly on claim 1. Therefore, the reasons set forth above with respect to the patentability of claim 1 would also apply here. Accordingly, the rejection under 35 U.S.C. §103(a) over Watanabe et al., as evidenced by Ogawa et al., Akiyama et al. and Kawasaki et al. should be withdrawn.

At pages 12-13 of the Office Action, the Examiner asserts that claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Watanabe et al., as evidenced by Ogawa et al. and Akiyama et al., and further combined with Sukata et al. (U.S. Patent No. 5,990,332). For the following reasons, this rejection is respectfully traversed.

The arguments set forth above with respect to Watanabe et al. as evidenced by Ogawa et al. and Akiyama et al. apply equally here.

Sukata et al. relates to charge control agents that might be combinable with any other general reference relating to toners. However, Sukata et al. does not overcome any of the deficiencies previously noted with respect to Watanabe et al., as evidenced by Ogawa et al. and Akiyama et al. and therefore even a combination of Watanabe et al. with Sukata et al. would still not teach or suggest the claimed invention. Furthermore, claim 6 is dependent directly on claim 1. Therefore, the reasons set forth above with respect to the patentability of claim 1 would also apply here. Accordingly, the rejection under 35 U.S.C. §103(a) should be withdrawn.

At page 13 of the Office Action, the Examiner rejects claim 7 under 35 U.S.C. §103(a) as being unpatentable over Watanabe et al., as evidenced by Ogawa et al. and Akiyama et al., and further combined with Akimoto et al. (U.S. Patent No. 5,707,772). However, the Examiner mainly relies on Watanabe et al. and Akimoto et al. to reject the claimed invention. The Examiner repeats her previous remarks as to Watanabe et al.; however, the Examiner acknowledges that the toner in Example 1 of Watanabe et al. does not comprise a polyethylene wax as recited in the instant claim 6. The Examiner then asserts that Akimoto et al. shows a low molecular weight polyethylene releasing agent. Accordingly, the Examiner states that it would have been obvious for a person with ordinary skill in the art to use the polyethylene releasing agent of Akimoto et al. as a wax in the toner to render the claimed invention obvious over the teachings of Watanabe et al. combined

with Akimoto et al. For the following reasons, this rejection is respectfully traversed.

Claim 7 is dependent directly on claim 1. Therefore, the reasons set forth above with respect to the patentability of claim 1 would also apply here. Accordingly, the rejection under 35 U.S.C. §103(a) over Watanabe et al. as evidenced by Ogawa et al., Akiyama et al., and Akimoto et al. should be withdrawn.

At pages 15 and 16 of the Office Action, the Examiner asserts that claims 8, 9, 12, 14, 17, 18, 21, 23, and 25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Watanabe et al., as evidenced by Ogawa et al. and Akiyama et al., combined with Kawasaki et al. and further combined with Sukata et al. The Examiner simply repeats her arguments from the previous Office Action. The Examiner does admit that the toner in Example 1 of Watanabe et al. does not show an organo-iron complex charge agent as recited in claims 8, 12, and 14 of the present application. However, the Examiner asserts that Watanabe et al. shows that the charge control can include one or more known charge control agents. The Examiner then notes that Sukata et al. shows charge controlling iron complexes and repeats her previous remarks to that reference. The Examiner, finally at page 16 concludes that it would have been obvious for a person having ordinary skill in the art to use the iron complex of an aromatic hydroxycarboxylic acid of Sukata et al. as the charge control agent in the toner to render the claimed invention obvious over the combined teachings of Watanabe et al. and Kawasaki et al. Accordingly, the Examiner states that one skilled in the art would have had a reasonable expectation of successfully obtaining a developer having the benefits disclosed by Sukata et al. For the following reasons, this rejection is respectfully traversed.

The previous arguments with respect to Watanabe et al. apply equally here. Sukata et al. and Kawasaki et al. do not overcome any of the deficiencies noted with respect to Watanabe et al., and therefore even a combination of the three references would not teach or suggest the claimed

invention. Moreover, claims 8, 9, 12, 14, 17, 21, 23, and 25 are dependent directly or indirectly on claim 1. Therefore, the reasons set forth above with respect to the patentability of claim 1 would also apply here. Accordingly, the rejection under 35 U.S.C. § 103(a) should be withdrawn.

At pages 16-18 of the Office Action, the Examiner rejects claims 11, 13, 15, 20, 22, and 24 under 35 U.S.C. §103(a) as being unpatentable over Watanabe et al., as evidenced by Ogawa et al. and Akiyama et al., combined with Kawasaki et al. and Sukata et al. and further combined with Akimoto et al. However, the Examiner relies predominantly on Watanabe et al. combined with Kawasaki et al. and Sukata et al. and further combined with Akimoto et al. to reject the claimed invention. The Examiner repeats her previous remarks with respect to Watanabe et al. combined with the teachings of Kawasaki et al. and Sukata et al. as set forth in the Office Action. Specifically, the Examiner asserts that the applicants do not provide any evidence to show that the amount of "about 1.8 wt.%" is different from "about 0.5 wt.%." The Examiner also states that it would have been obvious for a person having ordinary skill in the art to use the polyethylene releasing agent of Akimoto et al. as the wax in the toner to render the claimed invention obvious over the teachings of Watanabe et al., Kawasaki et al., and Sukata et al. For the following reasons, this rejection is respectfully traversed.

Claims 11, 13, 15, 20, 22, and 24 are dependent directly or indirectly on claim 1. Therefore, the reasons set forth above with respect to the patentability of claim 1 would also apply here. Accordingly, this rejection should be withdrawn.

At page 18 of the Office Action, the Examiner rejects claims 25-27 under 35 U.S.C. §103(a) as being unpatentable over Watanabe et al., as evidenced by Ogawa et al. and Akiyama et al., combined with Kawasaki et al., and Sukata et al. and further combined with Saha (U.S. Patent No. 5,500,320). The Examiner relies predominantly on Watanabe et al. combined with Kawasaki et al.

and Sukata et al. and further combined with Saha. The Examiner repeats her remarks from the previous Office Action regarding Watanabe et al., Kawasaki et al., and Sukata et al., and Saha. For the following reasons, this rejection is respectfully traversed.

With respect to the Examiner's rejection of claims 25-27, the arguments set forth above with respect to Watanabe et al., as evidenced by Ogawa et al., Akiyama et al., Kawasaki et al., and Sukata et al. equally apply here. With respect to Saha, Saha does not overcome any of the deficiencies noted with respect to Watanabe et al., or any of the other references cited by the Examiner (Kawasaki et al. and Sukata et al.). Moreover, claims 25-27 are indirectly dependent on claim 1. Therefore, the reasons set forth above with respect to the patentability of claim 1 would also apply here. Accordingly, the rejection under 35 U.S.C. §103 should be withdrawn.

At pages 19 and 20 of the Office Action, the Examiner rejects claims 28 and 29 under 35 U.S.C. §103(a) as being unpatentable over Watanabe et al., as evidenced by Ogawa et al. and Akiyama et al., combined with Kawasaki et al., Sukata et al., and Saha, and further combined with Creatura (U.S. Patent No. 5,102,769). Again, the Examiner repeats her previous remarks concerning the teachings of Watanabe et al., Kawasaki et al., Sukata et al., and Saha. The Examiner acknowledges that Saha does not teach that its strontium ferrite carrier particles are coated with a blend of polyvinylidiene and polymethmethacrylate polymers as recited in claims 28 and 29. However the Examiner asserts that Saha teaches that the carrier particles can be coated with a resin. The Examiner asserts that Creatura shows that the magnetic carrier particles can be coated with a polymeric coating comprising a blend of various fluorine based polymers in a weight ratio of 3 to 2. According to the Examiner, this ratio meets the ratios recited in claim 29 of the present application. For the following reasons, this rejection is respectfully traversed.

The arguments set forth above with respect to Watanabe et al., as evidenced by Ogawa et

al., Akiyama et al., Kawasaki et al., Sukata et al., and Saha apply equally here.

With respect to Creatura, Creatura does not overcome any of the deficiencies noted with respect to Watanabe et al., or any of the other secondary references cited by the Examiner. Furthermore, claims 28 and 29 are indirectly dependent on claim 1. Therefore, the reasons set forth above with respect to the patentability of claim 1 would also apply here. Accordingly, this rejection should be withdrawn.

At page 21 of the Office Action, the Examiner addresses applicants' arguments filed on November 12, 2002.

At page 22 of the Office Action, the Examiner rejects claims 30 and 35 under 35 U.S.C. §102(b) as being anticipated by Wilson et al. '274 (U.S. Patent No. 5,744,274). The Examiner asserts that Wilson et al. '274 shows toner particles and a magnetic carrier coated with polymethylmethacrylate (PMMA), wherein the toner particles have a charge rate that is within the range of about 0.9 to about 1.1 as recited in claim 30 of the present application. More specifically, the Examiner asserts that the table at column 12 of Wilson et al. '274 indicates a 2'/10' MECCA charge ratio of about 0.9 to about 1.1. For the following reasons, this rejection is respectfully traversed.

Claim 30 now recites that the toner particles not only have the 2'/10' MECCA charge ratio but also contain a surface treatment agent that is present on the surface of the toner particles. Wilson et al. '274 clearly does not teach or suggest a toner particle having surface treatment with the desired MECCA charge ratio. Furthermore, should the Examiner take the position that it would be obvious to surface treat the toner particles of Wilson et al. '274, the Examiner must also take into consideration the fact that by surface treatment, the MECCA ratios would clearly be affected by such a surface treatment. Thus, the present invention achieves a desirable MECCA charge ratio

with toner particles that have been surface treated which is not taught or suggested by Wilson et al. '274. Furthermore, it is unclear whether the MECCA test set forth in Wilson et al. is the same test provided in the present application and therefore a comparison of the MECCA values may not be proper. Accordingly, the rejection should be withdrawn.

At page 23 of the Office Action, the Examiner rejects claims 30 and 35 under 35 U.S.C. §102(e) as being anticipated by Wilson et al. '550 (U.S. Patent No. 6,221,550). According to the Examiner, Table II at column 13 indicates a 2'/10' MECCA charge ratio of 0.99, which falls within the range recited at claim 30 of the present application. For the following reasons, this rejection is respectfully traversed.

Again, as stated above with respect to the rejection regarding Wilson et al. '274, Wilson et al. '550 does not teach or suggest toner particles that have surface treatment agents present on the surface of the toner particles. Wilson et al. '550 clearly does not teach or suggest such toner particles. Furthermore, should the Examiner take the position that it would be obvious to surface treat the toner particles of Wilson et al., the Examiner must take into consideration the fact that any surface treatment of the Wilson et al. particles would greatly affect the MECCA charge ratio. Thus, Wilson et al. '550 does not teach or suggest the claimed invention and the rejection should be withdrawn. Furthermore, it is unclear whether the MECCA test set forth in Wilson et al. is the same test provided in the present application and therefore a comparison of the MECCA values may not be proper. Accordingly, the rejection should be withdrawn.

At page 24 of the Office Action, the Examiner rejects claim 42 under 35 U.S.C. §103(a) as being unpatentable over Amering et al. (U.S. Patent No. 4,912,009) combined with Diamond, Handbook of Imaging Materials. According to the Examiner, Amering et al. shows a resin, a colorant, and a charge control agent. Additionally, the Examiner asserts that Amering et al. shows

that the resulting resin comprises colloidal silica dispersed therein. The Examiner acknowledges that Amering et al. does not exemplify toners further comprising a surface treatment agent as recited in the claims of the present application. However, according to the Examiner, Diamond shows that surface additives are well known in the art of electrophotographic toners. According to the Examiner, Diamond shows the addition of surface additives, such as fumed silica, and surfactant materials, such as zinc stearate. For the following reasons, this rejection is respectfully traversed.

With respect to Amering et al., Amering relates to a positively charged toner. Furthermore, Amering describes for instance at column 5, lines 6-19 that there is good environmental stability or RH stability, meaning relative humidity stability. In other words, the charge stays substantially constant with a variation in relative humidity. As appreciated by the Examiner, Amering et al. does not teach or suggest the surface treatment of the toner particles. However, the Examiner makes the argument, which appears to be in hindsight, that it would be obvious to surface treat the toner particles of Amering et al. in view of Diamond. However, if one did surface treat the positively charged toner particles of Amering et al. with a surface treatment agent such as a fumed silica particle, the charge stability with respect to relative humidity would be destroyed. In other words, the very goals and benefits achieved by the Amering et al. toner particle would not be accomplished. Clearly, this would prevent any motivation for one to surface treat Amering et al. with a surface treatment agent.

As shown in the present invention, the present invention achieves excellent charge stability even in varying humidity conditions with respect to toner particles that are surface treated. The Examiner's attention is directed to pages 18 and 19 of the present application as well as the Examples including Figures 7 and 8 which shows excellent stability over a variety of humidity

conditions. To further assist the Examiner with an appreciation that by surface treating Amering et al., the relative humidity stability would be destroyed, attached to this response is a Declaration under 35 U.S.C. §132 which studied the surface treatment of a toner made in accordance with Amering et al. As shown in the attached Declaration, clearly the relative humidity becomes unstable with varying relative humidity conditions when surface treated with R972, which is a hydrophobic fumed silica like that used in the present application for surface treatment. Thus, it is clear that it would not be obvious to combine Diamond with Amering et al. and even if one did, the present application clearly provides unexpected and superior properties over Amering et al. Accordingly, this rejection should be withdrawn.

At page 25 of the Office Action, the Examiner rejects claims 1-5, 7, 10, 16, and 19 under 35 U.S.C. §103(a) as being unpatentable over Hopper et al. '920 (U.S. Patent No. 6,416,920) combined with Diamond. According to the Examiner, column 15, lines 25-62, and Example 1 at columns 15-17 of Hopper et al. '920 show a developer comprising a magnetic carrier and toner particles. The Examiner asserts that the toner particles of Hopper et al. includes 85.5 wt.% of a cross-linked styrene-acrylate copolymer, 4.3 wt.% of a colorant, 7.1 wt.% of a polyethylene wax, and 2.6 wt.% of colloidal aluminized silica. The Examiner acknowledges that Hopper et al. does not disclose that cross-linked styrene-acrylate copolymer is made by a "limited coalescence" process as recited in claim 10 of the present application. However, the Examiner asserts that the copolymer of Hopper et al. '920 appears to be the same or substantially the same as the toner resin made by the "limited coalescence" process. Additionally, the Examiner asserts that the upper limit range of "about 0.1 wt.% to about 0.5 wt.%" as recited in claim 1 of the present application reads on the amount of 2.6 wt.% of colloidal aluminized silica. The Examiner also asserts that column 7, lines 29-34 of Hopper et al. '920 show that the amount of the colloidal aluminized silica used in the

process of making its toner can be about 0.2 to about 10 wt.%. The Examiner acknowledges that the developer in Example 1 of Hopper et al. '920 does not comprise a charge control agent or an externally added surface treatment agent as recited in the instant claims. However, the Examiner asserts that column 14, lines 44-51 of Hopper et al. '920 show that a charge control agent can be added to its toner preferably in an amount of 0.1 to 5 wt.%. Additionally, the Examiner asserts that Diamond shows the use of surface additives, such as colloidal silicas and zinc stearates. Accordingly, the Examiner asserts that it would have been obvious for a person having ordinary skill in the art to incorporate a charge control agent in the toner particles and externally add a surface additive such as fumed silica particles in the toner disclosed by Hopper et al. For the following reasons, this rejection is respectfully traversed.

As shown, for instance, at column 14, line 29, Hopper et al. relates to the use of a cationic silica. In other words, the silica is positively charged when used with the toner particle of Hopper et al. This is quite different from the claimed invention as recited in claim 1 wherein the colloidal silica particles are not in a charged state as clearly shown in the present application in a preferred embodiment. Thus, the type of silica used is different and Hopper et al. emphasizes the need to use cationic silica for a variety of reasons. Accordingly, Hopper et al. alone or combined with Diamond would not teach or suggest the claimed invention. Accordingly, this rejection should be withdrawn.

At page 28 of the Office Action, the Examiner rejects claims 6, 8, 9, 11, 17, 18, and 20 under 35 U.S.C. §103(a) as being unpatentable over Hopper et al. '920 combined with Diamond, and further combined with Sukata et al. The Examiner asserts that the toner in example 1 of Hopper et al. '920 does not teach an organo-iron complex charge agent as recited in claim 6 of the present application. The Examiner asserts that Sukata et al. shows charge controlling iron complexes as presented by formula (I) of Sukata et al. Therefore, the Examiner believes that it

would have been obvious for a person having ordinary skill in the art, in view of the teachings of Hopper et al. '920, Diamond, and Sukata et al., to use an iron complex of an aromatic hydroxycarboxylic acid as the charge control agent in the Hopper et al. '920 toner. For the following reasons, this rejection is respectfully traversed.

The arguments set forth above with respect to Hopper et al. '920, Diamond, and Sukata et al. apply equally here. Additionally, claims 6, 8, 9, 11, 17, 18, and 20 are directly or indirectly dependent on claim 1. Therefore, the reasons set forth above with respect to the patentability of claim 1 would also apply here. Accordingly, this rejection should be withdrawn.

At page 29 of the Office Action, the Examiner rejects claims 12-14, 21-23, and 25 under 35 U.S.C. §103(a) as being unpatentable over Hopper et al. '920 combined with Diamond, and further combined with Sukata et al. The Examiner admits that the toner of Hopper et al. '920 does not show an organo-iron complex charge agent as recited in claims 12-14 of the present application. However, the Examiner asserts that Hopper et al. '920 and Diamond show that the charge control can include one or more known charge control agents, such as metal complexes of monoazo dyes, and iron complexes of salicylic acid and various other identified acids. The Examiner then notes that Sukata et al. shows charge controlling iron complexes, and repeats her previous remarks as to that reference. Finally, the Examiner states that it would have been obvious to a person having ordinary skill in the art to use the Sukata et al. charge control agent in a toner derived from Hopper et al. '920 in combination with Diamond, with the expectation of obtaining a developer having the beneficial properties shown by Sukata et al. For the following reasons, this rejection is respectfully traversed.

The arguments set forth above with respect to Hopper et al. '920, Diamond, and Sukata et al. apply equally here. Additionally, claim 12-14, 21-23, and 25 are directly or indirectly dependent

on claim 1. Therefore, the reasons set forth above with respect to the patentability of claim 1 would also apply here. Accordingly, this rejection should be withdrawn.

At page 31 of the Office Action, the Examiner rejects claims 15 and 24 under 35 U.S.C. §103(a) as being unpatentable over Hopper et al. '920 combined with Diamond, Sukata et al., and further combined with Hopper et al. '812 (U.S. Patent No. 5,482,812). According to the Examiner, the method of Hopper et al. '812 is similar to that disclosed in Hopper et al. '920, but for the use of colloidal aluminized silica. The Examiner asserts that Hopper et al. '812 teaches that the low molecular weight polyethylene can be present in an amount of about 1 to 15 wt.%. The Examiner then asserts that there is no evidence showing that the amount of "about 1.8 wt.%" is different in kind from the amount "about 1 wt.%." Additionally, the Examiner asserts that Hopper et al. '812 shows that the wax is permanently or substantially contained in toners, and that the toners have excellent release characteristics. Accordingly, the Examiner asserts that it would have been obvious for a person having ordinary skill in the art, in view of the teachings of Hopper et al. '812, to adjust the amount of polyethylene wax in the toner to render the claimed invention obvious over the combined teachings of Hopper et al. '920, Diamond, and Sukata et al. For the following reasons, this rejection is respectfully traversed.

The arguments set forth above with respect to Hopper et al. '920, Diamond, and Sukata et al. apply equally here.

Hopper et al. '920 does not teach or suggest having about 1.8 wt.% polyethylene wax, and Hopper et al. '812 which does not use colloidal aluminized silica utilizes low molecular polyethylene that can be present in an amount of about 1 to 15 wt.%. Accordingly, one skilled in the art by reading the two references, would conclude that only in situations where colloidal aluminized silica is not present, a low molecular polyethylene would be effected in an amount of

about 1 to 15 wt.%. Therefore, one skilled in the art would not combine Hopper et al. '920 with Hopper et al. '812.

Furthermore, claims 15 and 24 are indirectly dependent on claim 1. Therefore, the reasons set forth above with respect to the patentability of claim 1 would also apply here. Accordingly, this rejection should be withdrawn.

At page 33 of the Office Action, the Examiner rejects claims 25-27 under 35 U.S.C. §103(a) as being unpatentable over Hopper et al. '920 combined with Diamond and Sukata et al. and further combined with Saha. The Examiner acknowledges that Hopper et al. '920 does not disclose that the carrier particles can include strontium ferrite particles as recited in the claimed invention. However, according to the Examiner, Hopper et al. '920 shows that the carrier particles can comprise ferrite powders coated with a resin. The Examiner then states that Saha teaches hard magnetic carrier particles comprising strontium ferrite particles coated with a polymeric coating. Accordingly, the Examiner concludes that it would have been obvious for a person having ordinary skill in the art, in view of the teachings of Saha, to use Saha's strontium ferrite resin coated particles as the carrier particles in the developer to render the claimed invention obvious over the combined teachings of Hopper et al. '920, Diamond, and Sukata et al. For the following reasons, this rejection is respectfully traversed.

The arguments set forth above with respect to Hopper et al. '920, Diamond, Sukata et al., and Saha apply equally here. Furthermore, claims 25-27 are dependent on claim 21, which is ultimately dependent on claim 1. Accordingly, the reasons set forth above with respect to the patentability of claim 1 would apply equally here. Accordingly, the rejection under 35 U.S.C. §103(a) over Hopper et al. 920, Diamond, Sukata et al., and Saha should be withdrawn.

At page 34 of the Office Action, the Examiner rejects claims 28 and 29 under 35 U.S.C.

§103(a) as being unpatentable over Hopper et. al. '920 combined with Diamond, Sukata et al. and Saha and further combined with Creatura. The Examiner repeats her previous remarks with respect to the teachings of Hopper et al. '920, Diamond, Sukata et al. and Saha recited earlier in the Office Action. The Examiner admits that Saha fails to teach that strontium ferrite carrier particles are coated with a blend of polyvinylidiene and polymethylmethacrylate polymers as recited in instant claims 28 and 29. However, the Examiner asserts that Saha teaches that its carrier particles can be coated with poly (vinylidiene fluoride) resin or polymethacrylate resins. Furthermore, the Examiner asserts that Creatura shows that magnetic carrier particles can be coated with a polymeric coating comprising a blend of poly (vinylidiene fluoride) and poly (methylmethacrylate) in a weight ratio of 3 to 2. Accordingly, the Examiner concludes that it would have been obvious for a person having ordinary skill in the art, in view of the teachings of Creatura, to coat Saha's strontium ferrite carrier particles with Creatura's polymeric coating and to use those carrier particles in the developer to render the claimed invention obvious over the combined teachings of Hopper et al. '920, Diamond, Sukata, et al., and Saha. For the following reasons, this rejection is respectfully traversed.

The arguments set forth above with respect to Hopper et al. '920, Diamond, Sukata et al., Saha, and Creatura apply equally here. Furthermore, claims 28 and 29 are ultimately dependent on claim 1. Accordingly, the reasons set forth above with respect to the patentability of claim 1 would apply equally here. Accordingly, the rejection under 35 U.S.C. §103(a) over Hopper et al. '920, Diamond, Sakata et al., Saha, and Creatura should be withdrawn.

At page 35 of the Office Action, the Examiner indicates that claims 40 and 41 are allowable over the cited references. Additionally, the Examiner asserts claims 32-34 and 37-39 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The applicants and the undersigned appreciate the Examiner's indication that

these claims would be allowable. The applicants believe that in view of the above comments, the remaining claims would also be allowable.

The Examiner is respectfully requested to contact the undersigned by telephone should there be any remaining questions as to the patentability of the pending claims.

CONCLUSION

In view of the foregoing remarks, the applicants respectfully request the reconsideration of this application and the timely allowance of the pending claims.

If there are any other fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 50-0925. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

1. (Three times Amended) Toner particles comprising at least one toner resin, at least one charge control agent, at least one surface treatment agent, and optionally at least one release agent or colorant or both, wherein inorganic particles are present in said toner resin and said surface treatment agent is present on the surface of said toner particles, wherein said inorganic particles are colloidal silica [inorganic] particles that are not in a charged state and are present in an amount of from about 0.1 weight % to about 0.5 weight %, based on the weight of the toner.

30. (Amended) Toner particles having a charge rate such that the 2'/10' MECCA charge ratio is from about 0.9 to about 1.1, wherein said toner particles have at least one surface treatment agent present on the surface of said toner particles.

33. (Amended) The toner particles of claim 41 [12], wherein said toner resin comprises from about 80 wt% to about 95 wt% cross-linked styrene acrylate copolymer, said charge control agent comprises from about 1 wt% to about 2.5 wt% of organo iron complex charge agent, said surface treatment agent comprises from about 0.05 wt% to about 5.0 wt% of silica, and said inorganic particles comprise from about 0.1 wt% to about 0.5 wt% silica, based on the weight of the toner particles, wherein the toner particles having a charge rate such that the 2'/10' MECCA charge ratio is from about 0.9 to about 1.1.